

FEBRUARY 1967



LAMBDA power supplies and accessories



LAMBDA
ELECTRONICS CORP.

Note these features of all-silicon LM series modular power supplies

Features:

Meet Mil. Environment Specs.

RFI—MIL-I-16910

Vibration: MIL-T-4807A

Shock: MIL-E-4970A •
Proc. 1 & 2

Humidity: MIL-STD-810 •
Meth. 507

Temp. Shock: MIL-E-5272C •
(ASG) Proc. 1

Altitude: MIL-E-4970A •
(ASG) Proc. 1

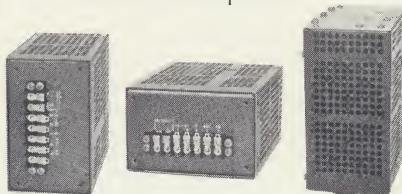
Marking: MIL-STD-130

Quality: MIL-Q-9858

FUNGUS PROOFING (optional)

all models available with
MIL-V-173 varnish for all
fungi nutrient components.

Convection cooled—
no heat sinking or
forced air required



Higher ratings with
forced air cooling—
ventilated construction
affords substantial
increases in rating
with small amounts of
air flowing over surfaces
of power supply

Thermally protected and
short circuit proof—current limiting

No voltage spikes or overshoot
on "turn on, turn off"
or power failure

Wide input voltage
and frequency range—

105-132 VAC,
(200-250 VAC, optional
at no extra charge)
45-440 cps

Overvoltage protection
available for all models
up to 70 VDC
starting at \$25

High Performance Option—

All models available with
these specifications at
moderate surcharge:

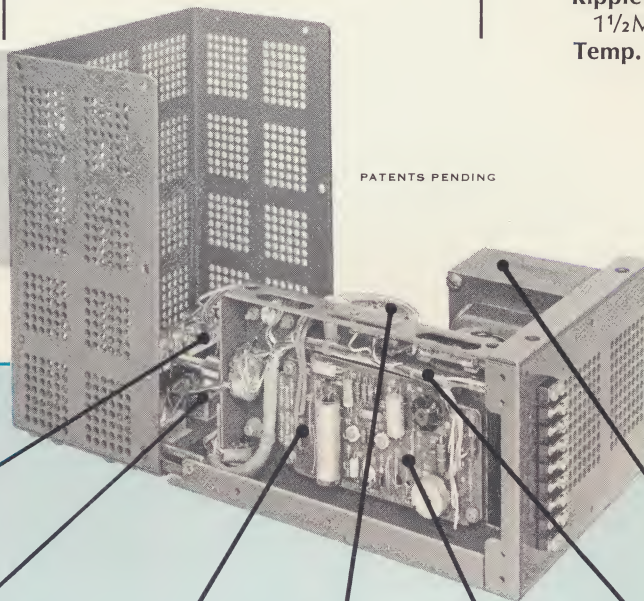
Line regulation—.01%+1MV

Load regulation—.02%+2MV

Ripple and Noise— $\frac{1}{2}$ MV rms;
1 $\frac{1}{2}$ MV p-to-p

Temp. Coef.—.01%/°C

Quality components:



MIL-R-26 type
wire wound resistors

All-silicon hermetically
sealed internally
mounted semiconductors

MIL-R-22684
type film resistors

Computer grade,
hermetically sealed
10-year life electrolytic
capacitors

MIL-R-11 composition
resistors

MIL-T-27 Grade 6
transformers

MIL-W-16878 wire

LM series data

A NOTE ABOUT PERFORMANCE OPTIONS

High Performance Option—Add Suffix "Y"—All LM models are available with the high performance specifications (printed in blue) at moderate surcharge (see page 13).

AC Input Option—Add Suffix "T"—All units are available with 200-250 VAC, 45-440 cps at no extra charge.**

Fungus Proofing Option—Add Suffix "R"—All models can be obtained with fungus proofing treatment with MIL-V-173 varnish for all fungi nutrient components at moderate surcharge (see page 13).

DC OUTPUT:

Voltage Range For voltage ranges see pages 4, 5, 6, 7

Regulated Voltage.

Regulation (line) 0.05% plus 4MV for line variations from 105-132 VAC.
0.01% plus 1.0 MV for line variations from 105-132 VAC.
(load) 0.03% plus 3MV load variations from 0 to full load.
0.02% plus 2 MV for load variations from 0 to full load.

Remote Programming

Resistance 200 ohms/volt., nominal
Voltage Volt per volt.

Ripple and Noise .. 1MV rms, 3MV p to p with either pos. or neg. terminal grounded.
0.5MV rms, 1.5MV p to p with 60 cps input.

Temperature

coefficient 0.03%/°C.
0.01%/°C.

AC INPUT: 105-132VAC: 45-440CPS
** 200-250VAC: 45-440CPS

LM 251, 257, 259, 263, 265 20 watts ⁽¹⁾
LM 201, 203, 260, 205, 207 30 watts ⁽¹⁾
LM 202, 204, 261, 206, 208 60 watts ⁽¹⁾
LM 252, 258, 262, 264, 266 70 watts ⁽¹⁾
Package B Models 80 watts ⁽¹⁾
Package C Models 140 watts ⁽¹⁾
Package CC Models 220 watts ⁽¹⁾
Package D Models 300 watts ⁽¹⁾
Package E Models 450 watts ⁽¹⁾
Package FA Models 750 watts ⁽¹⁾
Package F Models 900 watts ⁽¹⁾
Package G Models 1300 watts ⁽¹⁾

⁽¹⁾ With output loaded to 40°C rating, input 132 VAC and 55-65 CPS

AMBIENT OPERATING TEMPERATURE: Continuous duty from -20°C to +71°C ambient with corresponding load current ratings for all modes of operation, and all mounting positions.

STORAGE TEMPERATURE: -55°C to +85°C.

OVERLOAD PROTECTION:

Thermal Thermostat; automatic reset when over-temp condition is eliminated.

Electrical:

External Overload

Protection Fixed, automatic electronic current limiting circuit limits the output current upon external overloads, including short circuit, thereby providing protection for load as well as power supply.

INPUT & OUTPUT

CONNECTIONS: Heavy duty terminal block on rear of chassis.

CONTROLS:

DC output

control Simple screwdriver voltage adjustment over entire voltage range.

Remote Sensing Provision is made for remote sensing to eliminate effect of power output lead resistance on DC regulation.

METERS :

Voltmeter and ammeter on metered models of packages F and G. Metered panels available as an accessory for use with A, B, C, CC, D and E packages in conjunction with Lambda LRA-3, LRA-4, LRA-5 and LRA-6 Rack Adapters.

PHYSICAL DATA:

Weight A Package Models 5 lbs. net; 6 lbs. ship.
B Package Models 6 lbs. net; 7 lbs. ship.
C Package Models 9 lbs. net; 10 lbs. ship.
CC Package Models 15 lbs. net; 17 lbs. ship.
D Package Models 20 lbs. net; 23 lbs. ship.
E Package Models 28 lbs. net; 31 lbs. ship.
FA Package Models 52 lbs. net; 62 lbs. ship.
F Package Models 54 lbs. net; 64 lbs. ship.
G Package Models 72 lbs. net; 84 lbs. ship.

Finish A, B, C, CC, D and E Packages—Grey, FED. STD. 595 No. 26081

F and G Package Front Panels—Brushed aluminum clear anodized panels with grey inlay (standard).

mounting Three surfaces, each with tapped mounting holes, can be utilized for mounting A, B, C, CC, and D Package Models.



GUARANTEED FOR 5 YEARS

Wide Voltage Range Programmable LM series All Silicon Convection Cooled

**Here's a quick way to check
which LM zero and wide voltage range
packages fit your needs**

(Be sure to see pages 6 and 7 for Fixed Voltage
Range LM Series models from 3 to 150 volts.)

VOLTAGE RANGE	PACKAGE SIZE						
	A	B	C	D	E	F	G
0 - 7	✓	✓	✓	✓	✓	✓	✓
0 - 14	✓	✓	✓	✓	✓		
0 - 24	✓						
0 - 32	✓	✓	✓	✓	✓		
0 - 60	✓	✓	✓	✓	✓		
0 - 120	✓						
8.5- 14		✓	✓	✓			
13 - 23		✓	✓	✓			
22 - 32		✓	✓	✓			
30 - 60		✓	✓	✓			

Package A 3 $\frac{3}{16}$ " x 3 $\frac{3}{4}$ " x 6 $\frac{1}{2}$ "



MP-3



MP-5



Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM 251	0-7	0.35	0.31	0.29	0.27	\$ 69
LM 201	0-7	0.85	0.75	0.70	0.55	79
LM 202	0-7	1.7	1.5	1.4	1.1	89
LM 252	0-7	2.0	1.8	1.4	1.1	99
LM 257	0-14	0.27	0.24	0.23	0.22	69
LM 203	0-14	0.45	0.40	0.38	0.28	79
LM 204	0-14	0.90	0.80	0.75	0.55	89
LM 258	0-14	1.2	1.1	1.0	0.80	99
LM 259	0-24	0.18	0.16	0.15	0.14	69
LM 260	0-24	0.35	0.30	0.25	0.20	79
LM 261	0-24	0.70	0.65	0.60	0.45	89
LM 262	0-24	0.80	0.75	0.70	0.60	99
LM 263	0-32	0.14	0.12	0.11	0.10	69
LM 205	0-32	0.25	0.23	0.20	0.15	79
LM 206	0-32	0.50	0.45	0.40	0.30	89
LM 264	0-32	0.66	0.60	0.50	0.32	99
LM 265	0-60	0.08	0.07	0.07	0.06	79
LM 207	0-60	0.13	0.12	0.11	0.08	89
LM 208	0-60	0.25	0.23	0.21	0.16	99
LM 266	0-60	0.35	0.31	0.28	0.25	109
LM 267	0-120	0.10	0.09	0.08	0.07	109
LM 268	0-120	0.13	0.12	0.10	0.09	119

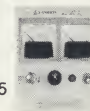
Package B 3 $\frac{3}{16}$ " x 4 $\frac{15}{16}$ " x 6 $\frac{1}{2}$ "



MP-3



MP-5



Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LMB-0-7	0-7	2.8	2.6	2.3	1.5	\$109
LMB-0-14	0-14	1.6	1.5	1.3	1.2	109
LMB-0-32	0-32	0.80	0.70	0.60	0.5	109
LMB-0-60	0-60	0.45	0.40	0.35	0.3	109
LM-217	8.5-14	2.1	1.9	1.7	1.3	119
LM-218	13-23	1.5	1.3	1.2	1.0	119
LM-219	22-32	1.2	1.1	1.0	0.80	119
LM-220	30-60	0.70	0.65	0.60	0.45	129

NOTES

¹ Current rating is from zero to I max.
Current rating applies over entire output voltage range.
Current rating applies for input voltage 105-132 VAC
55-65 cps.

For operation at 45-55 cps derate current rating 10%.

For operation at 360-440 cps consult factory for ratings and specifications.

² Prices F.O.B. Factory, Melville, N. Y. All specifications and prices subject to change without notice.

Package C 3 $\frac{1}{16}$ " x 4 $\frac{15}{16}$ " x 9 $\frac{3}{8}$ "



MP-3



MP-5

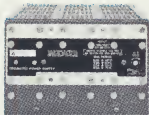


Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM-225	0-7	4.0	3.6	3.0	2.4	\$139
LMC-0-14	0-14	2.2	2.0	1.8	1.5	139
LMC-0-32	0-32	1.1	1.0	0.90	0.80	139
LMC-0-60	0-60	0.60	0.55	0.50	0.45	139
LM-226	8.5-14	3.3	3.0	2.5	2.0	139
LM-227	13-23	2.3	2.1	1.7	1.4	139
LM-228	22-32	2.0	1.8	1.5	1.2	139
LM-229	30-60	1.1	1.0	0.80	0.60	149

Package D 4 $\frac{15}{16}$ " x 7 $\frac{1}{2}$ " x 9 $\frac{3}{8}$ "



MP-5



Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM-234	0-7	8.3	7.3	6.5	5.5	\$199
LMD-0-14	0-14	4.9	4.2	3.4	2.7	199
LMD-0-32	0-32	2.5	2.1	1.7	1.3	180
LMD-0-60	0-60	1.3	1.1	0.95	0.75	239
LM-235	8.5-14	7.7	6.8	6.0	4.8	199
LM-236	13-23	5.8	5.1	4.5	3.6	209
LM-237	22-32	5.0	4.4	3.9	3.1	219
LM-238	30-60	2.6	2.3	2.0	1.6	239

Package E 4 $\frac{15}{16}$ " x 7 $\frac{1}{2}$ " x 11 $\frac{7}{8}$ "



MP-5

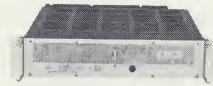
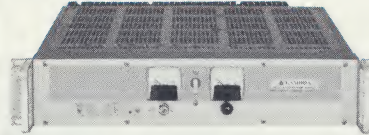


Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LME-0-7	0-7	12.0	10.5	8.5	6.8	\$249
LME-0-14	0-14	7.4	6.4	5.2	4.1	249
LME-0-32	0-32	3.7	3.2	2.6	2.1	249
LME-0-60	0-60	2.1	1.7	1.4	1.1	249

Package F 3 $\frac{1}{2}$ " x 19" x 16 $\frac{1}{2}$ "

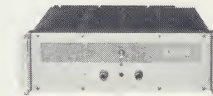
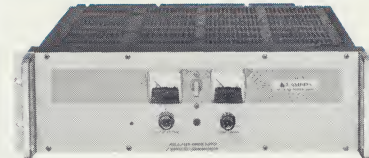


For metered models, add suffix "M" to model number and \$30.00 to the price below
High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 12) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$15 to price
Overvoltage Protection Option (See page 6) add suffix "OV" and add \$90.00 to price

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LMF-0-7	0-7	25.0	21.0	17.0	14.0	\$450

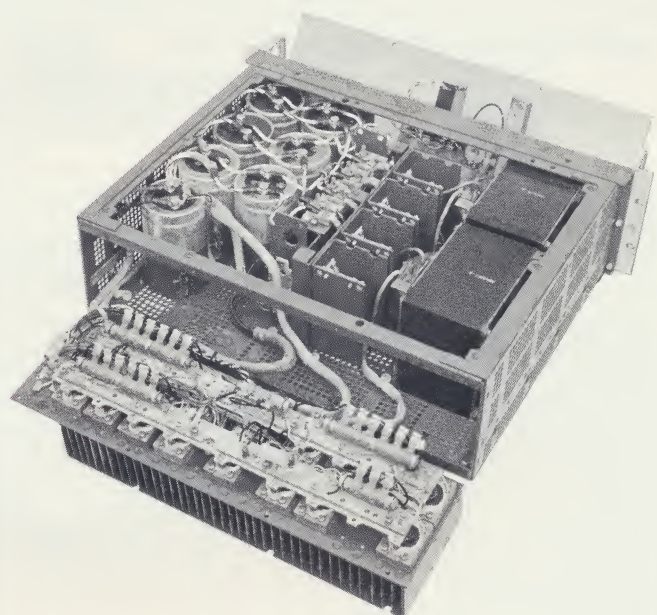
PRICES EFFECTIVE JANUARY 1, 1967.

Package G 5 $\frac{1}{4}$ " x 19" x 16 $\frac{1}{2}$ "



For metered models, add suffix "M" to model number and \$30.00 to the price below
High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 12) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$15 to price
Overvoltage Protection Option (See page 6) add suffix "OV" and add \$90.00 to price

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LMG-0-7	0-7	35.0	29.0	24.0	20.0	\$575



It's easy to service LM Series F and G package models in the rack.

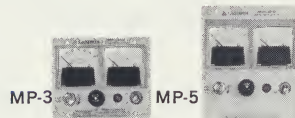
All electrical connections of these full-rack models are accessible without removing power supply from the rack because of hinged back, removable top and separable front panel.



GUARANTEED FOR 5 YEARS

Fixed Voltage Range All-Silicon Convection-Cooled, LM Series

Package B $3\frac{3}{16}'' \times 4\frac{15}{16}'' \times 6\frac{1}{2}''$



Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM B3	3 ±5%	3.8	3.3	2.6	1.6	\$ 119
LM B3P3	3.3±5%	3.8	3.3	2.6	1.6	119
LM B3P6	3.6±5%	3.8	3.3	2.6	1.6	119
LM B4	4 ±5%	3.8	3.3	2.6	1.6	119
LM B4P5	4.5±5%	3.7	3.2	2.5	1.5	119
LM B5	5 ±5%	3.7	3.2	2.5	1.5	119
LM B6	6 ±5%	3.2	2.9	2.4	1.4	119
LM B8	8 ±5%	3.2	2.9	2.4	1.4	119
LM B10	10 ±5%	2.7	2.5	2.2	1.4	119
LM B12	12 ±5%	2.5	2.3	2.1	1.3	119
LM B15	15 ±5%	2.2	2.0	1.8	1.3	119
LM B18	18 ±5%	2.0	1.8	1.7	1.3	119
LM B20	20 ±5%	1.8	1.6	1.5	1.2	119
LM B24	24 ±5%	1.4	1.3	1.2	1.1	119
LM B28	28 ±5%	1.3	1.2	1.1	1.0	119
LM B36	36 ±5%	1.1	1.0	0.90	0.85	129
LM B48	48 ±5%	0.9	0.85	0.80	0.75	129
LM B60	60 ±5%	0.7	0.65	0.60	0.54	129
LM B100	100 ±5%	0.37	0.34	0.30	0.28	139
LM B120	120 ±5%	0.30	0.28	0.25	0.23	139
LM B150	150 ±5%	0.25	0.23	0.20	0.19	149

NEW Package CC $4\frac{15}{16}'' \times 4\frac{15}{16}'' \times 9\frac{3}{8}''$



MP-5

Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM CC3	3 ±5%	11.0	9.4	8.2	5.5	\$179
LM CC3P3	3.3±5%	11.0	9.4	8.2	5.5	179
LM CC3P6	3.6±5%	11.0	9.4	8.2	5.5	179
LM CC4	4 ±5%	11.0	9.4	8.2	5.5	179
LM CC4P5	4.5±5%	10.5	9.0	8.0	5.5	179
LM CC5	5 ±5%	10.5	9.0	8.0	5.5	179
LM CC6	6 ±5%	9.0	8.4	7.7	5.5	179
LM CC8	8 ±5%	8.5	7.9	7.2	5.5	179
LM CC10	10 ±5%	7.5	7.0	6.3	5.0	179
LM CC12	12 ±5%	7.3	6.8	5.9	4.7	169
LM CC15	15 ±5%	6.0	5.6	5.1	4.3	169
LM CC18	18 ±5%	5.5	5.1	4.7	4.1	169
LM CC20	20 ±5%	5.0	4.6	4.2	3.6	169
LM CC24	24 ±5%	4.0	3.7	3.4	3.0	169
LM CC28	28 ±5%	3.5	3.4	3.1	2.8	169
LM CC36	36 ±5%	3.0	2.9	2.7	2.4	189
LM CC48	48 ±5%	2.5	2.4	2.2	1.9	189
LM CC60	60 ±5%	2.0	1.9	1.8	1.6	189
LM CC100	100 ±5%	1.0	0.96	0.90	0.80	199
LM CC120	120 ±5%	0.9	0.86	0.80	0.70	199
LM CC150	150 ±5%	0.7	0.67	0.62	0.55	199

Package C $3\frac{3}{16}'' \times 4\frac{15}{16}'' \times 9\frac{3}{8}''$



Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM C3	3 ±5%	5.3	4.6	3.7	2.5	\$ 139
LM C3P3	3.3±5%	5.2	4.5	3.6	2.5	139
LM C3P6	3.6±5%	5.2	4.5	3.6	2.5	139
LM C4	4 ±5%	5.2	4.5	3.6	2.5	139
LM C4P5	4.5±5%	5.1	4.4	3.5	2.4	139
LM C5	5 ±5%	5.1	4.3	3.4	2.4	139
LM C6	6 ±5%	4.8	4.1	3.3	2.4	139
LM C8	8 ±5%	4.6	3.9	3.2	2.1	139
LM C10	10 ±5%	4.2	3.6	3.0	2.0	139
LM C12	12 ±5%	4.0	3.5	2.9	1.9	139
LM C15	15 ±5%	3.5	3.2	2.8	1.9	139
LM C18	18 ±5%	3.2	3.0	2.7	1.9	139
LM C20	20 ±5%	3.1	2.9	2.6	1.8	139
LM C24	24 ±5%	2.5	2.4	2.2	1.5	139
LM C28	28 ±5%	2.3	2.1	2.0	1.4	139
LM C36	36 ±5%	2.0	1.8	1.7	1.3	149
LM C48	48 ±5%	1.6	1.4	1.3	1.0	149
LM C60	60 ±5%	1.1	1.0	0.90	0.80	149
LM C100	100 ±5%	0.55	0.51	0.47	0.42	164
LM C120	120 ±5%	0.49	0.45	0.42	0.38	164
LM C150	150 ±5%	0.39	0.36	0.33	0.30	169

Package D $4\frac{15}{16}'' \times 7\frac{1}{2}'' \times 9\frac{3}{8}''$



MP-5

Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM D3	3 ±5%	13.1	11.3	9.2	6.2	\$ 199
LM D3P3	3.3±5%	13.1	11.3	9.2	6.2	199
LM D3P6	3.6±5%	13.1	11.3	9.2	6.2	199
LM D4	4 ±5%	13.1	11.3	9.2	6.2	199
LM D4P5	4.5±5%	13.1	11.3	9.2	6.2	199
LM D5	5 ±5%	12.6	10.8	9.2	6.1	199
LM D6	6 ±5%	12.4	10.6	8.9	6.0	199
LM D8	8 ±5%	12.2	10.3	8.8	5.9	199
LM D10	10 ±5%	10.8	9.7	8.5	5.7	199
LM D12	12 ±5%	10.0	9.2	8.3	5.7	199
LM D15	15 ±5%	9.0	8.4	7.9	5.3	209
LM D18	18 ±5%	7.9	7.4	6.9	5.0	209
LM D20	20 ±5%	7.4	6.9	6.5	4.9	209
LM D24	24 ±5%	6.7	6.3	5.8	4.8	219
LM D28	28 ±5%	6.0	5.6	5.2	4.7	219
LM D36	36 ±5%	5.4	5.0	4.7	4.3	239
LM D48	48 ±5%	4.1	3.9	3.6	3.1	239
LM D60	60 ±5%	2.8	2.6	2.4	2.1	239
LM D100	100 ±5%	1.7	1.5	1.3	1.1	249
LM D120	120 ±5%	1.5	1.3	1.1	1.0	249
LM D150	150 ±5%	1.1	1.0	0.90	0.80	254

^{1, 2} See Notes on page 4

Package E 4¹⁵/₁₆" x 7¹/₂" x 11⁷/₈"



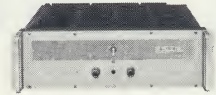
MP-5

Accessory Metered Panels: \$40.00

High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 3) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$10 to price
Overvoltage Protection Accessory (See page 12)

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM E3	3 ±5%	22.0	20.0	16.5	10.0	\$269
LM E3P3	3.3±5%	21.0	19.0	16.5	10.0	269
LM E3P6	3.6±5%	21.0	19.0	16.5	10.0	269
LM E4	4 ±5%	21.0	19.0	16.5	10.0	269
LM E4P5	4.5±5%	20.0	18.0	16.4	10.0	269
LM E5	5 ±5%	20.0	18.0	16.4	10.0	269
LM E6	6 ±5%	19.0	17.3	15.6	10.0	269
LM E8	8 ±5%	18.0	16.4	14.7	10.0	269
LM E10	10 ±5%	16.0	14.5	13.0	9.5	269
LM E12	12 ±5%	15.0	13.6	12.3	9.5	269
LM E15	15 ±5%	14.0	12.7	11.5	8.6	269
LM E18	18 ±5%	13.0	11.8	10.6	8.6	269
LM E20	20 ±5%	12.0	10.9	9.8	8.5	269
LM E24	24 ±5%	11.0	10.0	9.0	7.6	269
LM E28	28 ±5%	10.0	9.0	8.0	7.1	269
LM E36	36 ±5%	8.0	7.3	6.5	5.7	279
LM E48	48 ±5%	6.0	5.4	4.9	4.3	299
LM E60	60 ±5%	3.5	3.3	3.0	2.6	299
LM E100	100 ±5%	2.0	1.7	1.6	1.5	299
LM E120	120 ±5%	1.7	1.5	1.4	1.2	299
LM E150	150 ±5%	1.4	1.3	1.2	1.0	299

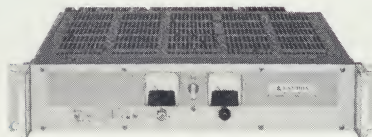
Package G 5¹/₄" x 19" x 16¹/₂"



For metered models, add suffix "M" to model number and \$30.00 to the price below
High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 12) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$15 to price
Overvoltage Protection Option (See page 6) add suffix "OV" and add \$90.00 to price

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM G3	3 ±5%	95.0	80.0	62.0	45.0	\$575
LM G3P3	3.3±5%	95.0	80.0	62.0	45.0	575
LM G3P6	3.6±5%	85.0	80.0	62.0	45.0	575
LM G4	4 ±5%	85.0	80.0	62.0	45.0	575
LM G4P5	4.5±5%	85.0	80.0	62.0	45.0	575
LM G5	5 ±5%	80.0	75.0	62.0	45.0	575
LM G6	6 ±5%	80.0	75.0	62.0	45.0	525
LM G8	8 ±5%	68.0	62.0	53.0	41.0	525
LM G10	10 ±5%	64.0	53.0	44.0	35.0	525
LM G12	12 ±5%	56.0	46.0	37.0	29.0	525
LM G15	15 ±5%	45.0	42.0	36.0	28.0	525
LM G18	18 ±5%	38.0	34.0	28.0	21.0	525
LM G20	20 ±5%	35.0	32.0	28.0	21.0	525
LM G24	24 ±5%	32.0	26.0	21.0	16.0	525
LM G28	28 ±5%	28.0	25.0	21.0	16.0	525
LM G36	36 ±5%	22.0	20.0	16.0	13.0	525
LM G48	48 ±5%	17.0	14.0	12.0	9.0	575
LM G60	60 ±5%	14.0	12.0	10.0	8.0	575
LM G100	100 ±5%	7.5	7.0	6.0	5.0	650
LM G120	120 ±5%	6.5	6.0	5.4	4.4	650
LM G150	150 ±5%	5.5	5.2	4.5	3.7	675

Package F 3¹/₂" x 19" x 16¹/₂"



For metered models, add suffix "M" to model number and \$30.00 to the price below
High Performance Option (See page 3) add suffix "Y" and add \$25.00 to price
200-250 VAC Option (See page 12) add suffix "T". No change in price
Fungus Option (See page 3) add suffix "R" and add \$15 to price
Overvoltage Protection Option (See page 6) add suffix "OV" and add \$90.00 to price

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM FA3	3 ±5%	31.5	28.5	24.0	18.0	\$395
LM FA3P3	3.3±5%	31.5	28.5	24.0	18.0	395
LM FA3P6	3.6±5%	31.5	28.5	24.0	18.0	395
LM FA4	4 ±5%	31.5	28.5	24.0	18.0	395
LM FA4P5	4.5±5%	31.5	28.5	24.0	18.0	395
LM FA5	5 ±5%	31.5	27.7	23.7	18.0	395
LM FA6	6 ±5%	30.5	26.0	22.0	18.0	395
LM FA8	8 ±5%	28.3	23.9	20.0	16.9	395
LM FA10	10 ±5%	25.0	21.0	18.9	15.7	395
LM FA12	12 ±5%	22.0	19.0	16.2	13.2	395
LM FA15	15 ±5%	19.4	18.3	15.2	12.6	395
LM FA18	18 ±5%	17.7	16.2	13.6	11.5	395
LM FA20	20 ±5%	16.0	14.7	12.6	10.5	395
LM FA24	24 ±5%	14.0	13.0	11.4	9.0	395
LM FA28	28 ±5%	13.5	12.0	10.4	8.5	395
LM FA36	36 ±5%	11.0	10.0	8.8	7.3	395
LM FA48	48 ±5%	8.1	7.5	6.5	5.4	395
LM FA60	60 ±5%	5.8	5.3	4.7	3.6	395
LM FA100	100 ±5%	3.1	2.7	2.3	1.9	425
LM FA120	120 ±5%	2.8	2.4	2.1	1.7	425
LM FA150	150 ±5%	2.4	2.1	1.8	1.4	425

Model	ADJ. VOLT. RANGE VDC	I MAX. AMPS ¹				Price ²
		40°C	50°C	60°C	71°C	
LM F3	3 ±5%	48.0	42.0	34.0	25.0	\$450
LM F3P3	3.3±5%	48.0	42.0	34.0	25.0	450
LM F3P6	3.6±5%	48.0	42.0	34.0	25.0	450
LM F4	4 ±5%	48.0	42.0	34.0	25.0	450
LM F4P5	4.5±5%	48.0	42.0	34.0	25.0	450
LM F5	5 ±5%	48.0	41.0	33.0	25.0	450
LM F6	6 ±5%	47.0	40.0	32.0	24.0	450
LM F8	8 ±5%	44.0	37.0	30.0	23.0	450
LM F10	10 ±5%	38.0	33.0	27.0	21.0	450
LM F12	12 ±5%	33.0	28.0	22.0	17.0	450
LM F15	15 ±5%	28.0	24.0	19.0	16.0	450
LM F18	18 ±5%	25.0	22.0	18.0	14.0	450
LM F20	20 ±5%	23.0	20.0	17.0	13.0	450
LM F24	24 ±5%	20.0	17.0	14.0	11.0	450
LM F28	28 ±5%	19.0	16.0	13.0	10.0	450
LM F36	36 ±5%	13.0	11.0	10.0	7.5	450
LM F48	48 ±5%	10.0	9.0	7.5	6.0	450
LM F60	60 ±5%	7.5	7.0	6.3	5.0	450
LM F100	100 ±5%	4.3	3.6	3.0	2.3	475
LM F120	120 ±5%	3.7	3.1	2.6	1.9	475
LM F150	150 ±5%	3.1	2.6	2.1	1.6	475

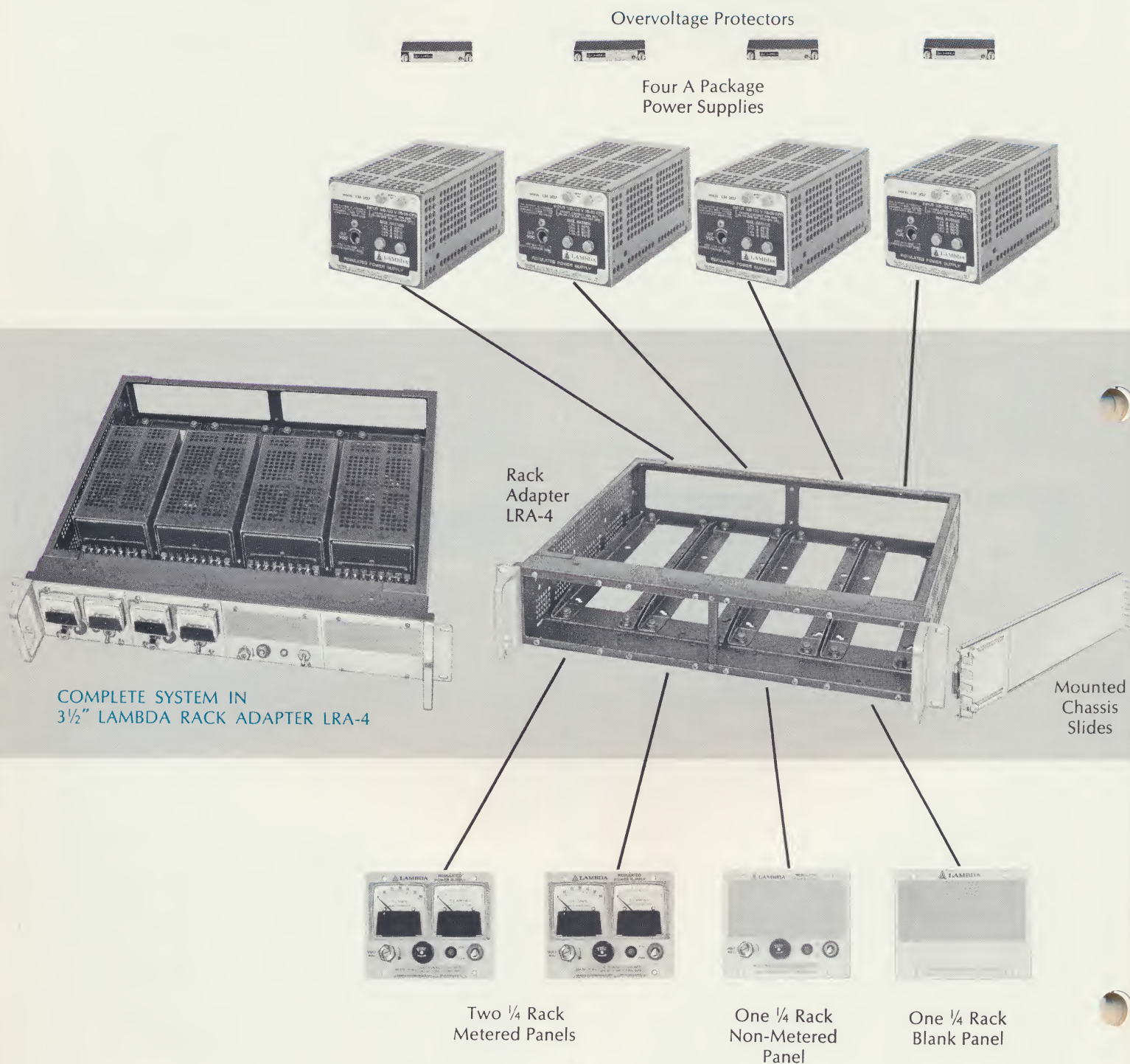
PRICES EFFECTIVE JANUARY 1, 1967.



GUARANTEED FOR 5 YEARS

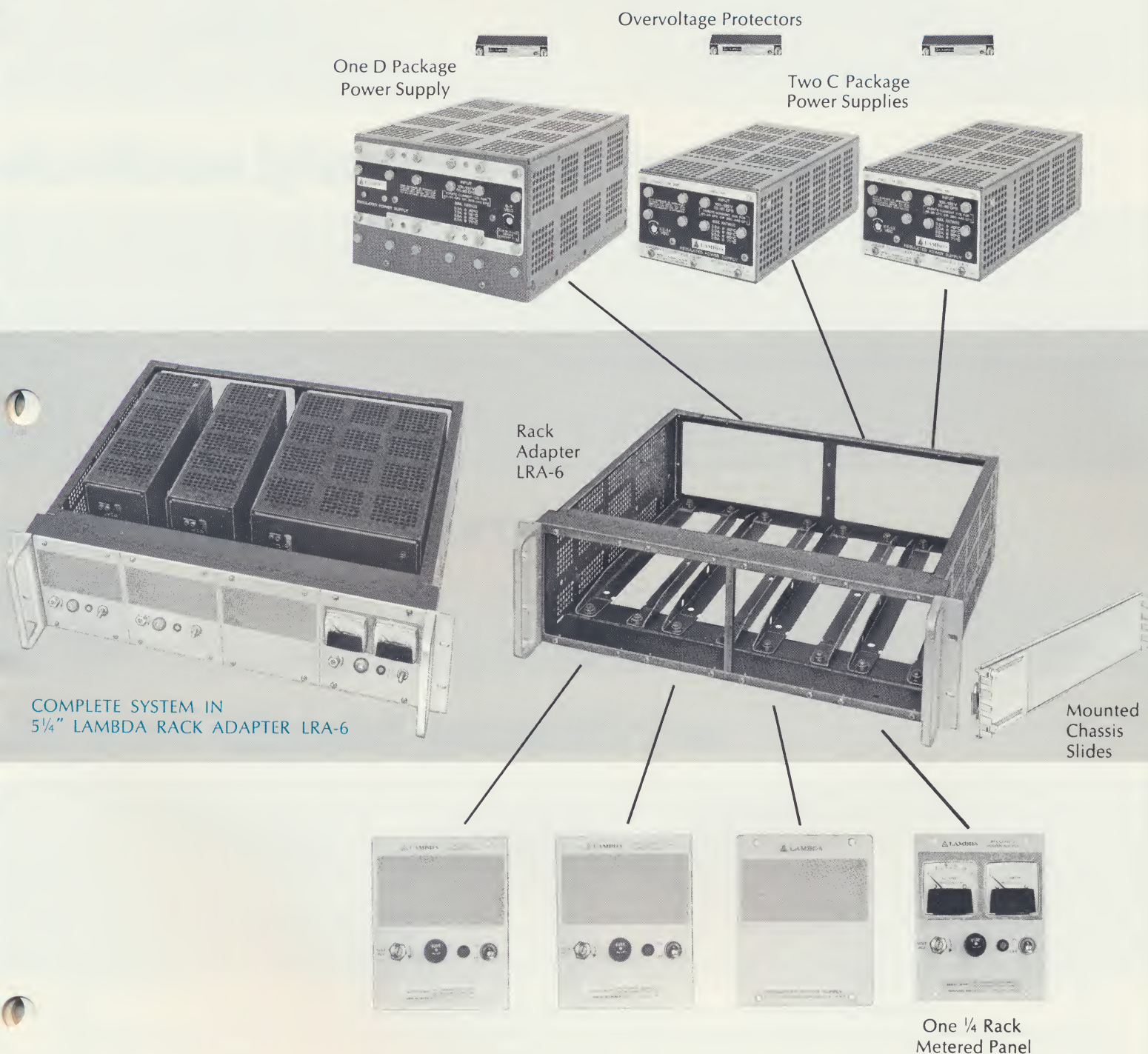
Any programable or fixed voltage Lambda LM series modular

TYPICAL APPLICATION IN 3½" RACK ADAPTER



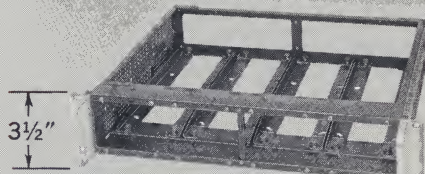
requirement is easily met with **power supply systems**

TYPICAL APPLICATION IN 5¼" RACK ADAPTER



GUARANTEED FOR 5 YEARS

In these Lambda LM



Rack Adapter LRA-4
(For use with chassis slides)



Rack Adapter LRA-5

you can put combinations



Package A
 $3\frac{3}{16}'' \times 3\frac{3}{4}'' \times 6\frac{1}{2}''$



Package B
 $3\frac{3}{16}'' \times 4\frac{15}{16}'' \times 6\frac{1}{2}''$



Package C
 $3\frac{3}{16}'' \times 4\frac{15}{16}'' \times 9\frac{3}{8}''$

with any

Overvoltage Protector  (3 voltage ranges)

with combinations of



$\frac{1}{4}$ Rack
Blank Panel



$\frac{1}{2}$ Rack
Blank Panel



Full Rack
Blank Panel



$\frac{1}{4}$ Rack
Metered Panel



$\frac{1}{4}$ Rack
Non-Metered Panel

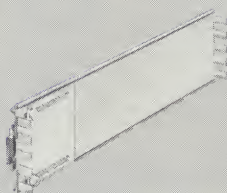
Lambda LM series $3\frac{1}{2}''$ rack adapters will take these power pack combinations

4 "A's"	3 "B's"	3 "C's"	2 "A's" + 1 "B" or 1 "C"	1 "A" + 2 "B's" or 2 "C's"
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rack adapters



Rack Adapter LRA-6
(For use with chassis slides)



Rack Adapter LRA-3

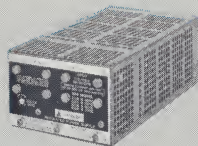
of these power packages



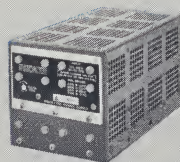
Package A
 $3\frac{3}{16}'' \times 3\frac{3}{4}'' \times 6\frac{1}{2}''$



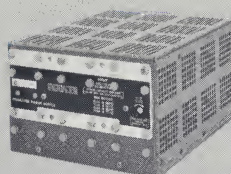
Package B
 $3\frac{3}{16}'' \times 4\frac{1}{16}'' \times 6\frac{1}{2}''$



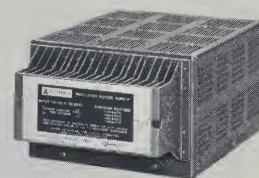
Package C
 $3\frac{3}{16}'' \times 4\frac{1}{16}'' \times 9\frac{3}{8}''$



Package CC
 $4\frac{1}{16}'' \times 4\frac{1}{16}'' \times 9\frac{3}{8}''$



Package D
 $4\frac{1}{16}'' \times 7\frac{1}{2}'' \times 9\frac{3}{8}''$



Package E
 $4\frac{1}{16}'' \times 7\frac{1}{2}'' \times 11\frac{7}{8}''$

overvoltage protector

Overvoltage Protector  (3 voltage ranges)

any of these panels



$\frac{1}{4}$ Rack
Blank Panel



$\frac{1}{2}$ Rack
Blank Panel



Full Rack
Blank Panel



$\frac{1}{4}$ Rack
Metered Panel



$\frac{1}{4}$ Rack
Non-Metered Panel

Lambda LM series $5\frac{1}{4}''$ rack adapters will take these power pack combinations

4 "A's"	4 "B's"	4 "C's"	3 "CC's" *	2 "D's"	2 "E's"	1 "CC" OR 1 "D" OR 1 "E" + 2 "A's" OR 2 "B's" OR 2 "C's"	1 "CC" + 1 "D" OR 1 "E" 1 "D" + 1 "E"
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*3 "CC's" will mount only in LRA-6 rack adapter.



GUARANTEED FOR 5 YEARS

How to order Lambda LM series Accessories and Options

Accessories for use with A, B, C, CC, D, and E Packages

RACK ADAPTERS, BLANK PANELS, MOUNTED CHASSIS SLIDES

These accessories can be ordered directly from the information on page 12. Select the units that meet your requirements, specify model number and price.

Overvoltage Protection—Externally mounted adjustable crowbar type overvoltage protection accessories are available in three adjustable voltage ranges up to 70 VDC. Select the accessory that fits the voltage range of your power supply and specify model number and price.

Model	Adj. Volt. Range	Price
LMOV-1	3- 8V	\$25
LMOV-2	6-20V	\$25
LMOV-3	18-70V	\$25

Metered Panels—3½" Metered panel MP-3 is used with rack adapters LRA-4, LRA-5 and packages A, B and C.

5¼" Metered panel MP-5 is used with rack adapters LRA-6, LRA-3 and packages A, B, C, CC, D and E.

To order these accessory metered panels, specify panel number which **MUST BE FOLLOWED BY** the MODEL NUMBER of the power supply with which it will be used.

Examples	Metered Panels	For Lambda Model	Panel Model No. and Price
	MP-3	LM B3	MP-3 LM B3 \$40
	MP-5	LM B3	MP-5 LM B3 \$40

Non-Metered Panels—3½" Non-metered panel P-3 is used with rack adapters LRA-4, LRA-5 and packages A, B and C.

5¼" Non-metered panel P-5 is used with rack adapters LRA-6, LRA-3 and packages A, B, C, CC, D and E.

To order these accessory non-metered panels, specify panel number which **MUST BE FOLLOWED BY** the MODEL NUMBER of the power supply with which it will be used.

Examples

Non-Metered Panels	For Lambda Model	Panel Model No. and Price
P-3	LM B3	P-3 LM B3 \$22
P-5	LM B3	P-5 LM B3 \$22

Meters, Overvoltage Protection, Chassis Slides for F and G Packages

Meters—F and G LM Packages are full rack power supplies available metered or non-metered. For metered models, add suffix "M" to the model number and add \$30 to the non-metered price.

Overvoltage Protection—F and G packages are available with *built-in* overvoltage protection up to 70

VDC. To order crowbar type overvoltage protection for F and G packages, add suffix "OV" to the model number and add \$90 to the price.

To order F and G packages with both overvoltage and meters, specify by adding suffix "OVM" to model number.

Examples LM G3 OVM LM F4 OVM

Chassis Slides

F and G Packages are available with mounted chassis slides (Jonathan 110 Series QD-14-2 slides). Add suffix "CS" to model number and add \$60 to price.

Performance Options All LM Series Models

High Performance Option

All models available with these specifications:

Line regulation—**.01% + 1MV**

Load regulation—**.02% + 2MV**

Ripple and Noise—**½MV rms; 1½MV p-to-p**

Temp. Coef.—**.01%/°C**

To order add suffix "Y" to the model number and add \$25.00 to the price.

AC Input Option

All models are available with 200-250 VAC input voltage at *no extra cost*.

To order add suffix "T" to model number.

Fungus Proofing Option

All models available with fungus proofing with MIL-V-173 varnish for all fungi nutrient components.

To order add suffix "R" to model number and add \$10 to the price of A, B, C, CC, D & E Package models; add \$15 to price of F & G package models.

A NOTE ABOUT ADDING SUFFIXES

Suffixes can be added to the basic model number in any order. Just be certain you add the correct suffix for each option you require and adjust the price accordingly.

For example a typical F package model could be written as follows: **LM-F-3-OVMR**. Such a number would include

	Price
LM F3 Power Supply	450
Built-in Overvoltage Protection	90
Metered Model	30
Fungus Proofing Option	15
Total Price	585

An order for an A Package LM-251 with high performance, AC input and fungus proofing options (Total price \$104.00) would be written as follows: **LM-251-YTR**

All accessories for this model, and all other A, B, C, CC, D or E package models, should be listed separately on the order.

Fixed Voltages—In addition to the fixed voltages listed, any fixed voltage is available up to 150 VDC at moderate surcharge.



GUARANTEED FOR 5 YEARS

Outline drawings and dimensions



DIMENSIONS (inches)

MODEL	N	P	Q	R	S	T	U	V	W	X	Y	Z
ALL "C" PACKAGES (as shown)	$4\frac{29}{32}$	$2\frac{1}{64}$	$3\frac{1}{64}$	$4\frac{1}{32}$	$2\frac{15}{64}$	$1\frac{3}{16}$	$1\frac{45}{64}$	$9\frac{3}{8}$	$6\frac{57}{64}$	$3\frac{3}{4}$	$6\frac{57}{64}$	$\frac{9}{16}$
ALL "B" PACKAGES	$4\frac{29}{32}$	$2\frac{1}{64}$	$3\frac{1}{64}$	$4\frac{1}{32}$	$2\frac{15}{64}$	$2\frac{15}{64}$	$\frac{31}{32}$	$6\frac{1}{2}$	$5\frac{1}{16}$	$3\frac{3}{4}$	$5\frac{1}{16}$	$\frac{9}{16}$
ALL "A" PACKAGES	$3\frac{23}{32}$	$1\frac{27}{64}$	$2\frac{3}{64}$	$2\frac{27}{32}$	$2\frac{3}{8}$	$1\frac{5}{16}$	$4\frac{7}{64}$	$6\frac{1}{2}$	$5\frac{1}{16}$	$2\frac{27}{32}$	$5\frac{5}{16}$	$2\frac{7}{64}$

NOTES:

1. Provide clearance holes, as required, for screw heads located on bottom of "B" and "C" package supplies, and on side of "A" package supplies
2. No. 8-32 tapped holes (4 on each surface) for customer chassis mounting
3. No.8-32 tapped hole, on "B" package supplies only
4. Two No.6-32 tapped holes for mounting overvoltage protector



MODEL	U	V	W	X	Y	Z
ALL "CC" PACKAGES	$1\frac{23}{32}$	$4\frac{1}{16}$	$\frac{7}{16}$	—	$3\frac{61}{64}$	$4\frac{15}{16}$
ALL "D" PACKAGES	$3\frac{1}{64}$	$6\frac{9}{16}$	$3\frac{1}{64}$	$3\frac{1}{4}$	$6\frac{33}{64}$	$7\frac{1}{2}$
ALL "E" PACKAGES	$3\frac{1}{64}$	$6\frac{9}{16}$	$3\frac{1}{64}$	$3\frac{1}{4}$	$6\frac{33}{64}$	$7\frac{1}{2}$

NOTES:

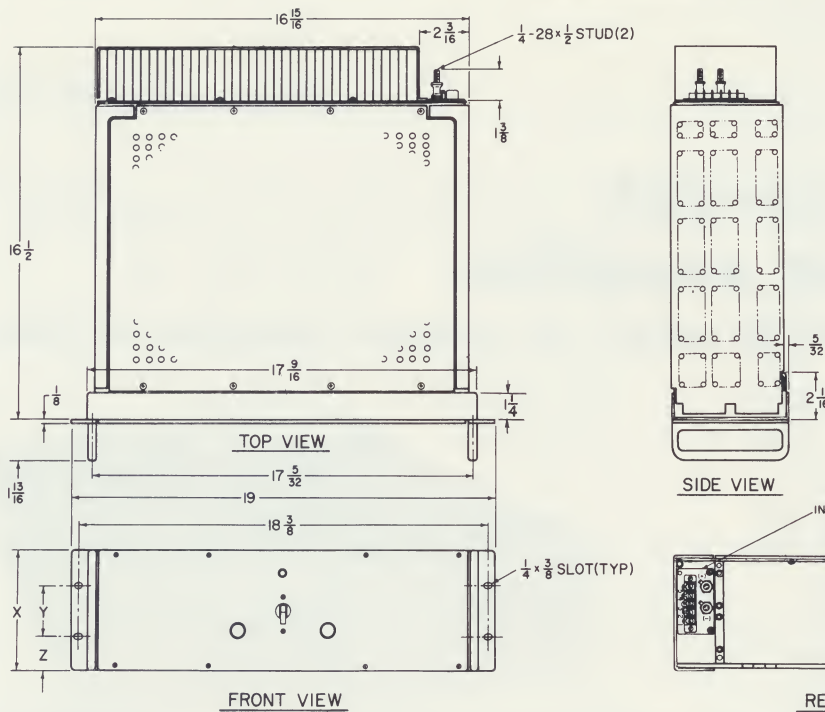
1. "E" package must be mounted with radiator fins vertical
2. Provide 5/16 dia. clearance holes for screw heads on side of "CC", "D" and "E" package supplies
3. 8-32 tapped holes, 6 on front surface of "D" and "E" (4 on "CC"), 4 each on bottom and side surfaces, for customer chassis mounting
4. Two No. 6-32 tapped holes for mounting overvoltage protector

LM SERIES F & G PACKAGES

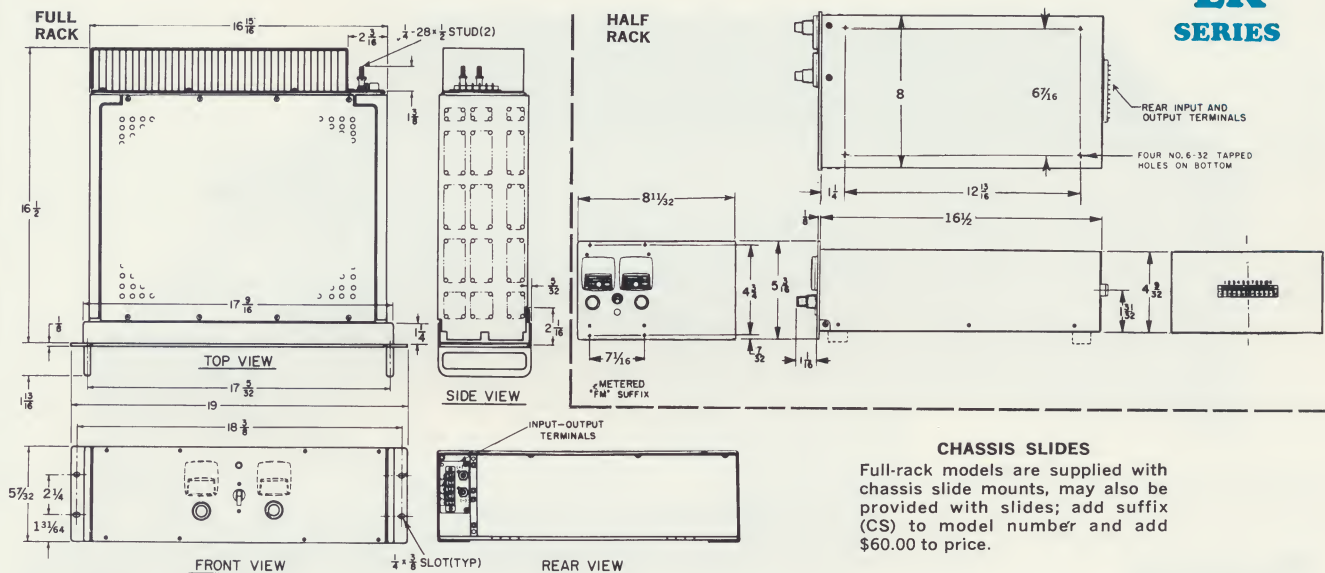
MODEL	DIMENSION (inches)		
	X	Y	Z
ALL "F" PKGS	$3\frac{15}{32}$	3	$1\frac{5}{64}$
ALL "G" PKGS	$5\frac{7}{32}$	$2\frac{1}{4}$	$1\frac{31}{64}$

CHASSIS SLIDES

Full-rack models are supplied with chassis slide mounts, may also be provided with slides; add suffix (CS) to model number and add \$60.00 to price.



LK SERIES



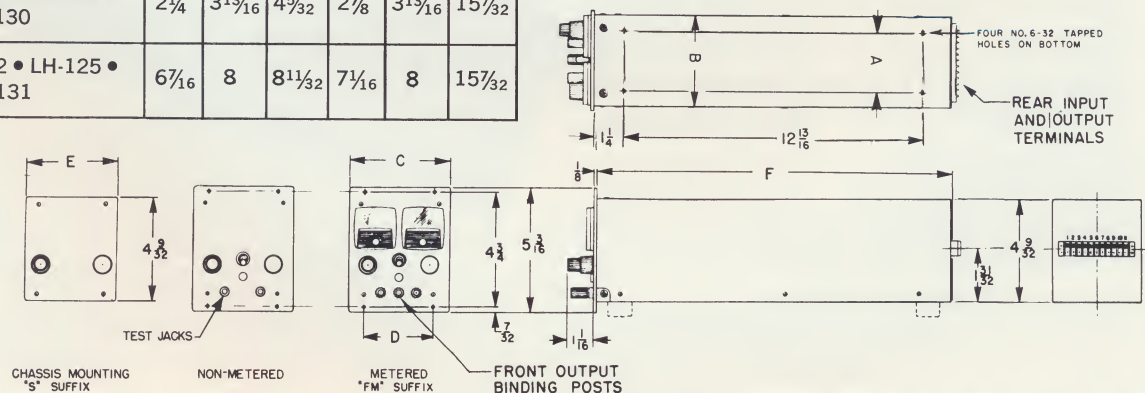
CHASSIS SLIDES

Full-rack models are supplied with chassis slide mounts, may also be provided with slides; add suffix (CS) to model number and add \$60.00 to price.

DIMENSIONS (inches)

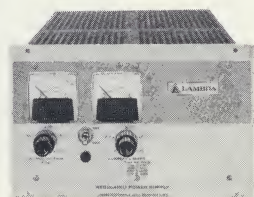
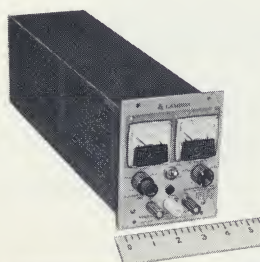
MODELS	A	B	C	D	E	F
LH-118 • LH-121 • LH-124 • LH-127 • LH-130	$2\frac{1}{4}$	$3\frac{13}{16}$	$4\frac{5}{32}$	$2\frac{7}{8}$	$3\frac{13}{16}$	$15\frac{7}{32}$
LH-119 • LH-122 • LH-125 • LH-128 • LH-131	$6\frac{7}{16}$	8	$8\frac{11}{32}$	$7\frac{1}{16}$	8	$15\frac{7}{32}$

LH SERIES

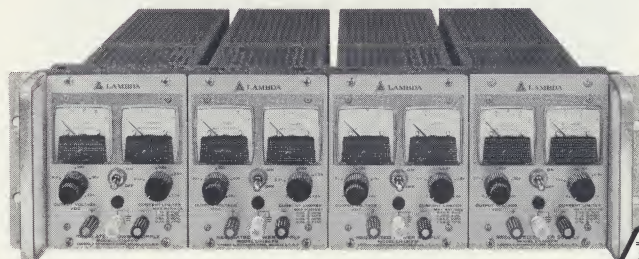


LH Series all-silicon $\frac{1}{4}$ and $\frac{1}{2}$ rack power supplies for bench, rack or chassis use—

**Multi-Current-Rated™
for 30°C, 50°C, 60°C and
71°C Ambients**



Minimum bench width—
Rubber feet provided for bench use



4 DC outputs in a single rack



Features

- All Silicon
- Rack • Bench • Chassis Use
- Remotely Programmable—Constant I./Constant V. and continuously Variable
- Meet RFI Spec.—Mil-I-16910
- Remote Sensing
- Regulation—.015% or 1 MV (Line or Load)
- Ripple—250 μ V RMS, 1 MV P-P
- Temp. Coef. .015%/°C
- Integrated circuit Internal voltage reference
- Transformer—designed to MIL-T-27 Grade 6
- Completely Protected—Short Circuit Proof—Continuously Adjustable Automatic Current Limiting
- Constant I./ Constant V. by automatic crossover
- Series/Parallel Operation and $\pm$ output to a common reference
- No Voltage Spikes or Overshoot on “turn on”, “turn off” or power failure
- Wide Input Voltage and Frequency Range—105-135 VAC, 45-480 cps
- Convection-Cooled—no blowers, no external heat sinks

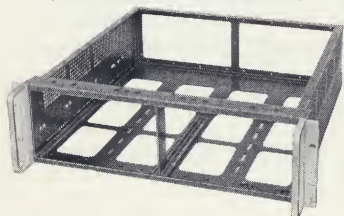
Meet Mil. Environment Specs.

Vibration; MIL-T-4807A
Shock: MIL-E-4970A • Proc. 1 & 2
Humidity: MIL-STD-810 • Meth. 507
Temp. Shock: MIL-E-5272C • (ASG) Proc. 1
Altitude: MIL-E-4970A • (ASG) Proc. 1
Marking: MIL-STD-130
Quality: MIL-Q-9858

Accessories for use with LK and LH Series

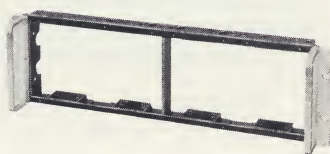
Rack Adapter LRA-1

5 $\frac{1}{4}$ " Height x 16 $\frac{1}{2}$ " Depth
(For use with chassis slides) Price \$60.00



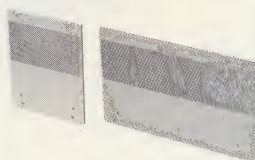
Rack Adapter LRA-2

5 $\frac{1}{4}$ " Height
Price \$25.00



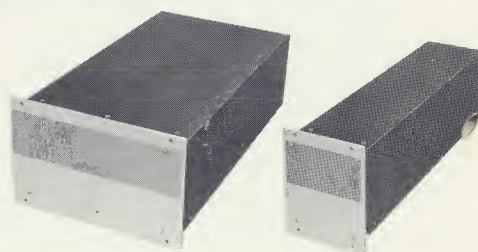
Blank Front Panels

Model LBP-10 ($\frac{1}{4}$ rack size)
Price \$5.00
Model LBP-20 ($\frac{1}{2}$ rack size)
Price \$7.50



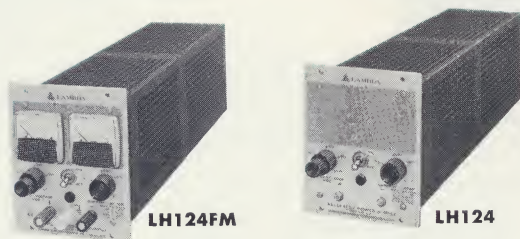
Blank Chassis with Blank Front Panels

Model LBC-10 ($\frac{1}{4}$ rack size) Price \$25.00
Model LBC-20 ($\frac{1}{2}$ rack size) Price \$35.00



 **LAMBDA** ELECTRONICS CORP.

1/4 RACK
metered and
non-metered

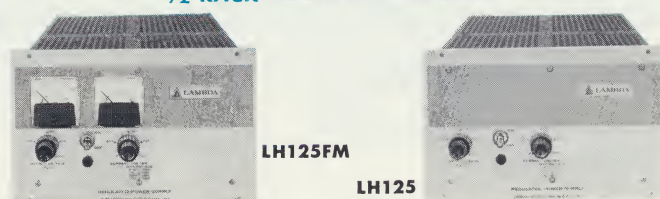


SIZE 5 $\frac{3}{16}$ " x 4 $\frac{3}{16}$ " x 15 $\frac{1}{2}$ "

PATENTS PENDING

Model ²	ADJ. VOLT. RANGE VDC	CURRENT RANGE AT AMBIENT OF: ¹				Price ²
		30°C	50°C	60°C	71°C	
LH 118	0-10	0-4.0A	0-3.5A	0-2.9A	0-2.3A	\$175
LH 121	0-20	0-2.4A	0-2.2A	0-1.8A	0-1.5A	159
LH 124	0-40	0-1.3A	0-1.1A	0-0.9A	0-0.7A	154
LH 127	0-60	0-0.9A	0-0.7A	0-0.6A	0-0.5A	184
LH 130	0-120	0-0.50A	0-0.40A	0-0.35A	0-0.25A	225

1/2 RACK metered and non-metered



SIZE 5 $\frac{3}{16}$ " x 8 $\frac{3}{8}$ " x 15 $\frac{5}{8}$ "

PATENTS PENDING

Model ²	ADJ. VOLT. RANGE VDC	CURRENT RANGE AT AMBIENT OF: ¹				Price ²
		30°C	50°C	60°C	71°C	
LH 119	0-10	0-9.0A	0-8.0A	0-6.9A	0-5.8A	\$289
LH 122	0-20	0-5.7A	0-4.7A	0-4.0A	0-3.3A	260
LH 125	0-40	0-3.0A	0-2.7A	0-2.3A	0-1.9A	269
LH 128	0-60	0-2.4A	0-2.1A	0-1.8A	0-1.5A	315
LH 131	0-120	0-1.2A	0-0.9A	0-0.8A	0-0.6A	320

1 Current rating applies over entire voltage range.

2 Prices are for non-metered models. For metered models add suffix (FM) to model number and add \$25.00 to price. For non-metered chassis mounting models, add suffix (S) to model number and subtract \$5.00 from non-metered price.

LH SERIES DATA

DC OUTPUT:

Regulated Voltage.

Regulation (line or load) .015% or 1mV (whichever is greater) for line or variations from 105-135 VAC or load variations from 0 to full load.

Remote Programming

Resistance200 ohms/volt.

VoltageVolt per volt.

Ripple and Noise .250 μ V RMS; 1mV p. to p. with either pos. or neg. terminal grounded.

Temperature

coefficient0.015% per °C.

CONSTANT CURRENT: (Current regulated line and load):

Automatic Crossover.

Voltage Range . . . As shown in table above.

Current Range . . . Minimum—20% of 30° Rating.
Maximum—As shown in table above.

Regulation (line or load) Less than 15mA for Input Variations of 105-135 VAC and from 0 to rated VDC load voltage change.

Ripple and Noise .Less than 1mA RMS either pos. or neg. terminal grounded.

CONSTANT CURRENT: (Current regulated line and load):

High Precision: Barrier Strip Reconnection.

Voltage Range . . . As shown in table above.

Current Range . . .5% to 100% of Current Ratings at any ambient temperature as shown in table above.

Regulation (line or load) Less than .05% or 0.5mA whichever is greater for Input Variations of 105-135 VAC and from 0 to rated VDC load voltage change.

Ripple and Noise .Less than 0.5mA RMS either pos. or neg. terminal grounded.

AC INPUT:105-135 VAC: 45-480 CPS.

LH 118 155 watts (!) LH 122 300 watts (!) LH 127 115 watts (!)

LH 119 325 watts (!) LH 124 120 watts (!) LH 128 250 watts (!)

LH 121 135 watts (!) LH 125, 131 275 watts (!) LH 130 145 watts (!)

(!) With output loaded to full 30°C rating and maximum input voltage

AMBIENT OPERATING TEMPERATURE:

Continuous duty from -20° to +71°C with load current ratings shown in table above.

STORAGE TEMPERATURE: -55°C to +85°C.

OVERLOAD PROTECTION:

ThermalThermostat; automatic reset when over-temp. condition is removed.

Electrical:

External Overload

ProtectionAdjustable, automatic electronic current limiting circuit limits the output current to the pre-set value, thereby providing protection for load as well as power supply. Current limiting set-tability to 105% of rated current.

Internal Failure

ProtectionProvided by fuse.

INPUT & OUTPUT CONNECTIONS:

Terminal block on rear of chassis, five-way binding posts on front panel of models with suffix (FM) only.

METERS:

Voltmeter and ammeter on suffix (FM) models.

CONTROLS:

(Consult Instruction Manual for specific instructions)

DC output

controlsCoarse and fine voltage adjust and current adjust on front panel all models.

Remote Sensing . . Provision is made for remote sensing to eliminate effect of power output lead resistance on DC regulation.

PowerSwitch, front panel except for chassis mounted models with suffix (S).

PHYSICAL DATA:

WeightLH 118, 121, 124, 127, 130—14 lbs. net, 18 lbs. ship.
LH 119, 122, 125, 128, 131—25 lbs. net, 30 lbs. ship.

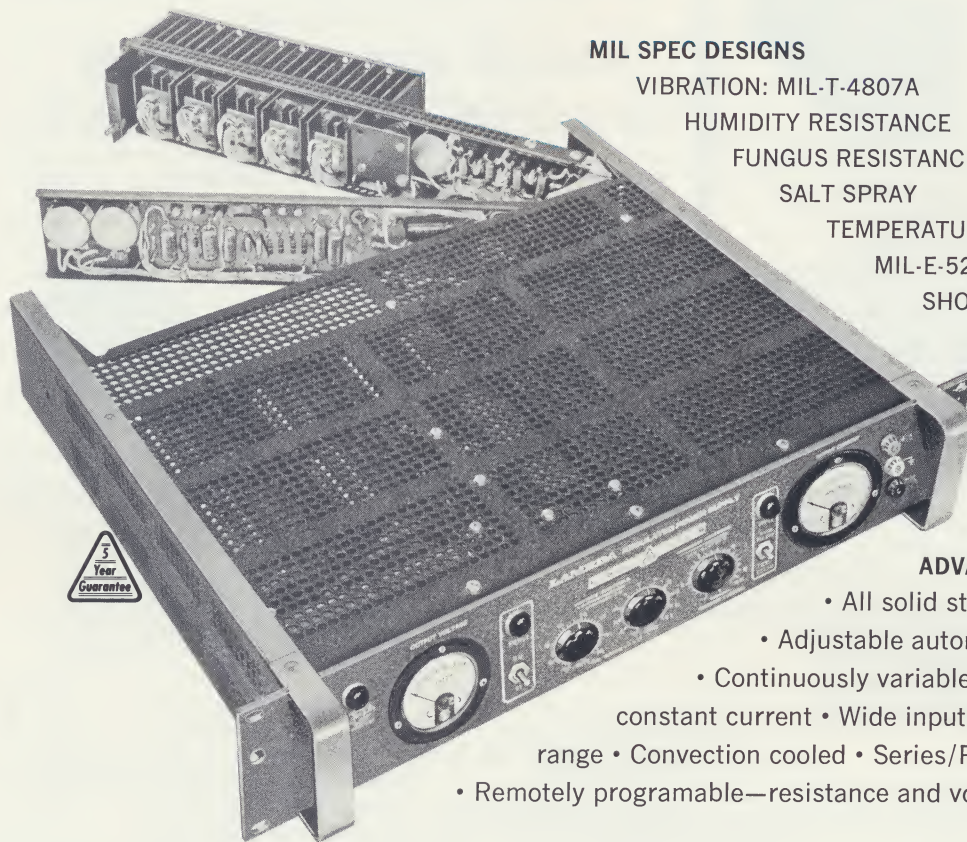
Panel Finish . . .Brushed aluminum clear anodized panels with grey inlay (standard).



GUARANTEED FOR 5 YEARS

Lambda LE Series Environment Engineered

**transistorized
regulated power
supplies**



MIL SPEC DESIGNS

VIBRATION: MIL-T-4807A

HUMIDITY RESISTANCE

FUNGUS RESISTANCE

SALT SPRAY

TEMPERATURE SHOCK

MIL-E-5272C • (ASG) Procedure 1

SHOCK: MIL-E-4970A • Procedure 1 & 2

ALTITUDE: MIL-E-4970A

• (ASG) Procedure 1

QUALITY: MIL-Q-9858

MARKING: MIL-STD-130

(Certified Test Data

available upon request)

ADVANCED ENGINEERING FEATURES

- All solid state • Completely protected
- Adjustable automatic current limiting
- Continuously variable • Constant voltage/
constant current • Wide input frequency and voltage
range • Convection cooled • Series/Parallel operation
- Remotely programmable—resistance and voltage

LE Series Condensed Data

DC OUTPUT (VOLTAGE REGULATED FOR LINE AND LOAD)(1)

Model	Voltage Range	Current Range	Price(2) Effective July 15, 1966
LE101	0-36 VDC	0- 5 Amp	\$490
LE102	0-36 VDC	0-10 Amp	595
LE103	0-36 VDC	0-15 Amp	695
LE104	0-36 VDC	0-25 Amp	875
LE105	0-18 VDC	0- 8 Amp	495
LE106	0-18 VDC	0-15 Amp	650
LE107	0-18 VDC	0-22 Amp	725
LE109	0- 9 VDC	0-10 Amp	495
LE110	0- 9 VDC	0-20 Amp	695

(1) Current rating applies over entire voltage range.

(2) Prices are for nonmetered models. For models with ruggedized MIL meters add suffix "M" to model number and add \$40 to the non-metered price. For metered models and front panel control add suffix "FM" and add \$50 to the nonmetered price.

REGULATED VOLTAGE:

Regulation

(line or load) Less than .05 per cent or 8 millivolts (whichever is greater). For input variations from 105-135 VAC and for load variations from 0 to full load.

Remote Programming 50 ohms/volt constant over entire voltage range.

Ripple and Noise Less than 0.5 mv rms (45-66 CPS).
Less than 1.0 mv rms (320-480 CPS).

Temperature Coefficient Less than 0.015%/°C.

AC INPUT: 105-135 VAC; 45-66 CPS and 320-480 CPS in two bands selected by switch.

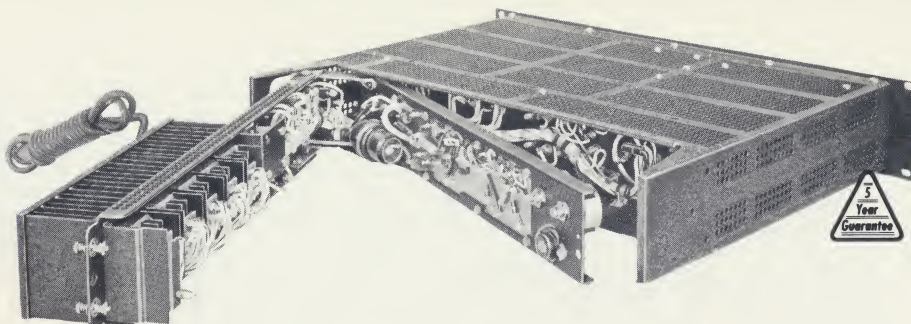
PHYSICAL DATA:

Mounting Standard 19" rack mounting.

Size LE 101, LE 105, LE 109 3½" H x 19" W x 16" D
LE 102, LE 106, LE 110 5¼" H x 19" W x 16" D
LE 103, LE 107 7" H x 19" W x 16½" D
LE 104 10½" H x 19" W x 16½" D

Lambda LA Series Convection Cooled

**transistorized
regulated power
supplies**



A-C Input—105-140 VAC • 60±0.3 CPS
Reg.—0.05% or 8 MV line • 0.10% or 15 MV load
Ripple—1 MV rms
Temp. Coef.—0.025%/°C

FEATURES

- Convection Cooled
- Remote Programing Over Vernier Band
- Hermetically-Sealed Transformer Designed to MIL-T-27
- Easy Service Access
- Constant Current Operation—Consult factory
- Completely Protected
- Ambient 50° C

Model	VDC	Current Range	Net Wgt. (Lbs.)	Size (Inches) (H X W X D)	Price*
LA 50-03B	0-34	0-5 AMP	50	3½ x 19 x 14¾	\$350.00
LA 100-03B	0-34	0-10 AMP	90	7 x 19 x 14¾	465.00
LA 200-03B	0-34	0-20 AMP	150	10½ x 19 x 16½	685.00
LA 20-05B	20-105	0-2 AMP	55	3½ x 19 x 14¾	350.00
LA 40-05B	20-105	0-4 AMP	100	7 x 19 x 14¾	495.00
LA 8-08B	75-330	0-0.8 AMP	55	3½ x 19 x 14¾	395.00
LA 15-08B	75-330	0-1.5 AMP	100	7 x 19 x 14¾	560.00
LA 30-08B	75-330	0-3 AMP	170	10½ x 19 x 16½	860.00

Lambda Com-Pak® Series

**regulated power supplies
tube-type**



A-C Input—105-125 VAC • 50-400 CPS
Reg.—0.15% or 0.3 V line • 0.25% or 0.5 V load
Ripple—3 MV rms

AC Output—(unregulated) . . 6.5 VAC (at 115 • VAC Input)¹
C 200 Series . . 10 A; C 400 Series . . 15 A; • C 800 Series . .
20 A; C 1500 Series . . 30 A. • ¹Allows for voltage drop in
connecting leads. • Isolated and ungrounded.

FEATURES

- Easy Access • Convection Cooled • Ambient 50° C
- Hermetically-Sealed Transformer Designed to MIL-T-27

Model	VDC	Current Range	Net Wgt. (Lbs.)	Size (Inches) (H X W X D)	Price*
C 281	125-325	0-200 MA	53	5¼ x 19 x 14¾	179.50
C 282	325-525	0-200 MA	53	5¼ x 19 x 14¾	189.50
C 481	125-325	0-400 MA	53	5¼ x 19 x 14¾	269.50
C 482	325-525	0-400 MA	53	5¼ x 19 x 14¾	284.50
C 881	125-325	0-800 MA	84	7 x 19 x 14¾	350.00
C 882	325-525	0-800 MA	84	7 x 19 x 14¾	395.00

Other Tube Regulated Models

MODELS 28 AND 29

A-C Input—105-125 VAC • 50-400 CPS
Reg.—1% line or load
Ripple—5 MV (Model 28) • 10 MV (Model 29)
Ambient—50° C • Mounting—Rack

MODELS 50R, 50 AND 71

A-C Input—105-125 VAC, 50-60 CPS
Reg.—0.15% or 0.1 V line • 0.5% or 0.3 V load • (Models 50R
and 50) • 0.15% or 0.3 V line or load (Model 71)
Ripple—5 MV rms (Models 50R and 50)
8 MV rms (Model 71)
Ambient—40° C
Mounting—Rack (50R) Bench (50 and 71)

Model	VDC	Current Range	Net Wgt. (Lbs.)	Size (Inches) (H X W X D)	Price*
28	200-325	0-100 MA	19	5¼ x 19 x 8	\$ 79.50
29	100-200	0-100 MA	19	5¼ x 19 x 8	89.50
50R	0-500 0-50 0-200	0-500 MA Bias High Imped.	89	10½ x 19 x 14¼	475.00
50	See Model 50R above		110	12½ x 22 x 15	495.00
71	0-500 0-50 0-200	0-200 MA Bias High Imped.	49	13 x 8¾ x 14½	350.00

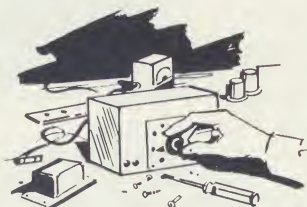
*Prices are for non-metered models (except for models 50, 50R and 71 which are metered models not available without meters). To order metered models, add suffix "M" to model number and add \$30.00 to non-metered price.



GUARANTEED FOR 5 YEARS

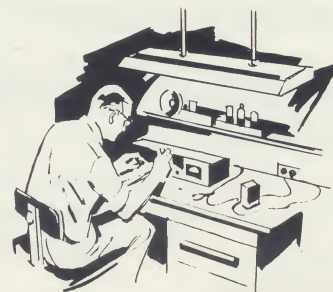
All Lambda Power Supplies are **guaranteed for 5 years** — **materials and labor**

Lambda's 5-Year Guarantee has been in effect for fourteen years. It has covered every Lambda Power Supply sold since 1953. It is another proof of Lambda's high caliber engineering, product design, quality control and production techniques which result in exceptional reliability.



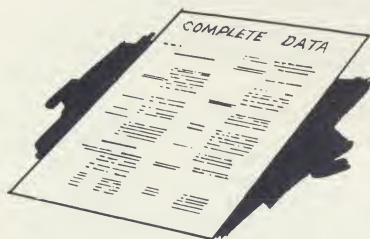
LABOR AND MATERIALS...

The Lambda Five-Year Guarantee covers labor and all materials (except for tubes and fuses) when returned to the factory. It does include all semiconductor components.



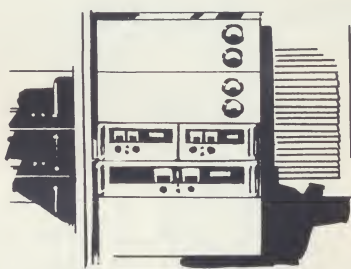
COMPONENTS FREE OF CHARGE, IF YOU REPAIR...

If the customer chooses to perform the maintenance, Lambda will supply all replacements for defective components without cost.



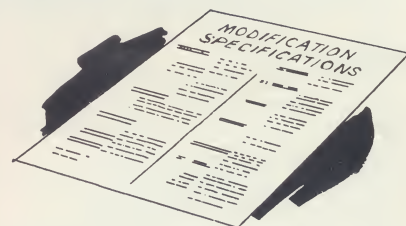
PERFORMANCE TO PUBLISHED SPECIFICATIONS...

The Lambda 5-Year Guarantee covers the operation of the power supply for five years to published specifications. If, at any time during the five-year period, the power supply does not meet the published specification, it can be returned to the factory for calibration.



TRANSFERABLE IF YOU SELL UNIT...

If the power supply is sold to a manufacturer who is using it in a system, which he is reselling, the guarantee is transferable—as long as the Lambda Power Supply is sold as original equipment.



ALL LAMBDA MODIFICATIONS...

The Five-Year Guarantee covers all Lambda Power Supplies, including power supplies which have been modified by Lambda to fit customer's specific requirements.



GUARANTEED FOR 5 YEARS

General Information

PRICES (U.S. and Canada) F.O.B. Factory, Melville, N. Y. effective January 1, 1967. All specifications and prices subject to change without notice.

SOURCE INSPECTION 2% EXTRA (\$25.00 minimum) per shipment.

TERMS. Net 30 days.

TAXES. All applicable taxes, federal, state and local, are extra.

QUOTATIONS. All written quotations will be honored for 30 days from the date on which they are made.

TESTING Every Lambda power supply is electrically tested to meet every electrical catalog specification. There is a large safety margin between published maximum specifications and factory test limits. This tolerance is incorporated in the specifications to allow for normal industrial component deviations. Tube replacements may be made with any equivalent tubes meeting E.I.A. specifications.

Current Range: The current ranges given apply to the entire DC output voltage range, and over entire AC input voltage range, no "de-rating" is necessary.

Polarity: Either positive or negative terminal may be grounded.

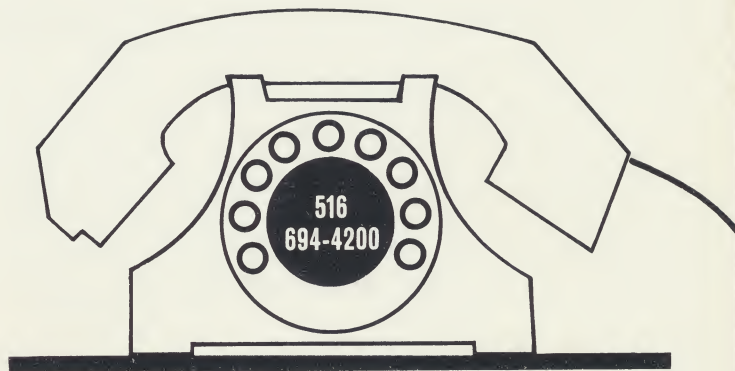
RATINGS All components used are of the highest quality and are operated well within manufacturers ratings. Ample safety factors are provided in the design to insure the long life, and the dependable, trouble-free operation so desirable in industrial and laboratory applications.

SHIPMENT Express shipment in our experience has provided the fastest and safest delivery of power supplies. Unless you specifically request otherwise, your order will be forwarded in this manner. Urgent needs can be shipped by air express or air freight in accordance with your instructions.

DELIVERY Under normal conditions, we ship from stock. If circumstances do not permit immediate delivery on a particular model, you will be notified at once and a firm shipping date will be given you. Urgent requirements often can be handled on an expedited basis. Your mail, telephone or telegraph order or inquiry will bring you a same-day reply. Our telephone number is Area Code 516, MYrtle 4-4200.

SHIPMENT TO FACTORY Please communicate with us before shipping power supply equipment so that we can arrange with you to keep your "down time" to a minimum.

REPAIR PARTS These are always in stock for immediate shipment for repair purposes. When ordering a repair part, please give the number on the component itself. Also state the model number, serial number, and, if possible, date of original purchase of power supply.



**Call this number
516-694-4200
for power supply**

- ORDERING INFORMATION
- TECHNICAL DATA
- QUANTITY DISCOUNTS
- APPLICATION INFORMATION

On the
West Coast,
call
(213) 877-0041

Also use TWX:

East Coast: 510-224-6484

West Coast: 910-499-2651

Our personnel are competent to assist you and alert to serve you. They are there solely to answer your call and accommodate you. Call us now about your power supply needs.

See back cover for listing of all Lambda Sales Offices.



GUARANTEED FOR 5 YEARS

Convenient Lambda Sales Offices

1 LAMBDA ELECTRONICS CORP.
515 Broad Hollow Road, Melville, L. I., New York 11749
Tel. 516-MY 4-4200 • TWX: 510-224-6484

2 OSSMANN INSTRUMENTS INC.
101 Pickard Drive, Syracuse, New York 13211
Tel. 315-GL 4-2461 • TWX: 710-541-1523
P. O. Box 207, Wappinger Falls, N. Y.
Tel. 914-297-7777
3100 Monroe Avenue, Rochester, New York 14618
Tel. 716-LU 6-0380 • TWX: 716-221-1513
Vestal Parkway East, Vestal, New York
Tel. 607-785-9947

3 NEW ENGLAND MARKETING ASSOCIATES
55 Salem St., Lynnfield, Mass. 01942
Tel. 617-245-9530

4 R. G. SIDNELL & COMPANY
14235 Detroit Ave., Cleveland, Ohio 44107
Tel. 216-221-1313
1007 Wood Street, Pittsburgh, Pennsylvania 15221
Tel. 412-242-1476
3400 South Dixie Drive, Dayton, Ohio 45439
Tel. 513-293-1194

5 W. A. BROWN & ASSOCIATES
3039 Northeast 32 Avenue, Ft. Lauderdale, Florida 33308
Tel. 305-564-8000
222 Weber Avenue, Orlando, Florida 32803
Tel. 305-425-5505 • TWX: 810-850-0146
1314 Buford St. N.W. Huntsville, Alabama 35801
Tel. 205-536-8393 • TWX: 205-533-1026
325 First St., Alexandria, Virginia 22314
Tel. 703-836-1800 • TWX: 710-832-9813
1108 Burke St. N.W., Winston Salem, North Carolina 27101
Tel. 919-725-5384
212 Bradley Dr. N.E., Fort Walton Beach, Fla. 32548
Tel. 904-243-6424
1590 Cooledge Road, Tucker, Georgia 30083
Tel. 404-939-1674
82 Huxley Pl., Newport News, Va. 23606
Tel. 703-245-8272

6 BARD ASSOCIATES, INC.
La Grange Industrial Park, La Grange, Illinois
Tel. 312-354-0660 • TWX: 312-352-7782
6806 No. Farmleigh Dr., Indianapolis, Indiana 46220
Tel. 317-849-2723 • TWX: 317-571-8343
7700 Morgan Avenue South
Minneapolis, Minnesota 55423
Tel. 612-866-1700

7 POLY-ONICS, INC.
4434 West 90th Terrace, Leawood, Kansas 66207
Tel. 913-NI 8-4173 • TWX: 913-642-8388
47 Village Square Shopping Center
Hazelwood, Missouri 63042
Tel. 314-TE 7-0597 • TWX: 314-921-3853

8 LAMBDA ELECTRONICS CORP.
222C Frito-Lay Tower
Exchange Park
Dallas, Texas 75235
Tel. 214-358-3465

9 LAMBDA ELECTRONICS CORP.
Frank Chase, Regional Sales Manager
13425 Wyandotte St., N. Hollywood, California 91605
Tel. 213-877-0041 • TWX: 910-499-2651

10 LAMBDA ELECTRONICS CORP.
210 California Ave., Suite B, Palo Alto, Calif. 94306
Tel. 415-327-5933 • TWX: 910-373-1724

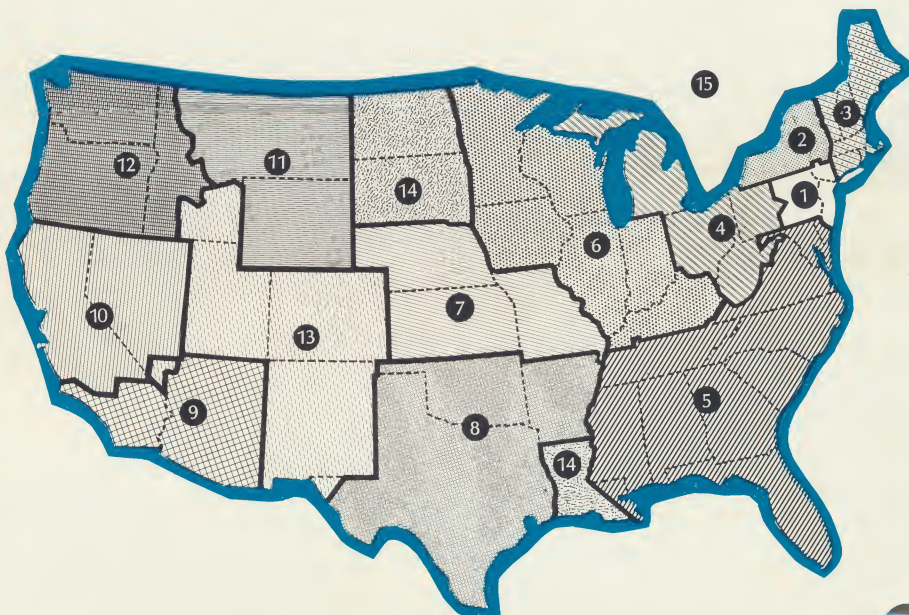
11 LAMBDA ELECTRONICS CORP.
13425 Wyandotte St., N. Hollywood, California 91605
Tel. 213-877-0041 • TWX: 910-499-2651

12 ARNESON ASSOCIATES
5950-6th Ave. S., Seattle, Wash. 98134
Tel. 206-762-7664
P.O. Box 12067, Portland, Oregon 97212
Tel. 503-646-3416

13 PRICE-PARRISH ELECTRONICS INC.
2130 South Albion, Denver, Colorado 80222
Tel. 303-756-9455 • TWX: 910-931-0536
507 Wyoming Blvd. N.E., Albuquerque, New Mexico 87112
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Tel. 801-487-7847 • TWX: 801-521-2402

14 LAMBDA ELECTRONICS CORP.
515 Broad Hollow Road, Melville, L. I., New York 11749
Tel. 516-MY 4-4200 • TWX: 516-224-6484

15 ROR ASSOCIATES
1470 Don Mills Road, Don Mills, Ontario, Canada
Tel. 416-444-4403 • TWX: 610-492-1355
3285 Cavendish Blvd., Montreal 28, Quebec, Canada
Tel. 514-482-8430 • TWX: 610-421-3670
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Tel. 613-828-1330



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